

## CLAIMS

1. A method of augmenting endogenous vertebrate growth hormone release by a chemical synergy between oral intake of a component 1 such as the compound acetyl-L-carnitine and a component 2 such as the compound L-ornithine.
2. Said component 1 in claim 1 may also be a substance selected from a group consisting of acetyl-L-carnitine, any acylated ester of L-carnitine having an acyl chain of three to six carbon length, pharmacological acceptable salts thereof, mixtures thereof, and a pharmacological appropriate dose over the range of 10 milligrams to 20 grams.
3. Said component 2 in claim 1 may also be a substance selected from a group consisting of L-ornithine, L-arginine, L-lysine, L-histidine, L-leucine, L-valine, L-methionine, L-threonine, putrescine, spermidine, pharmacological acceptable salts thereof, mixtures thereof, and a pharmacological appropriate dose over the range of 1 milligram to 10 grams.
4. Various pharmacological dosages of the component 1 and the component 2 in claim 1 may be administered by techniques selected from a group consisting of: any appropriate physiological formulation for delivery of an oral dietary supplement, separate oral ingestion of the component 1 and the component 2 at approximately the same time, and oral ingestion of a mixture of the component 1 and the component 2 as a single formulation.
5. The method in claim 1 where ingestion of the component 1 and the component 2 must be preceded by a fast of approximately 3 to 4 hours.
6. A method for augmenting the release of growth hormone in humans and animals by using the method of claim 1 for the treatment of conditions and disorders selected from the group consisting of aging decline in growth hormone release, insufficient growth hormone release in the case of pathology and surgery, emergency needs for prolonged awakeness and physical strength, augmenting the function of the hypothalamus, augmenting the energy production system, augmenting the immune system, augmenting the neurological system, augmenting the general anabolic conditioning of the body, improvement in the circadian rhythm entraining system.
7. The method of claim 6, wherein the preferred night time human pharmacological dose of the component 1 is 500 milligrams and the component 2 dose is 20 to

50 milligrams, and administered within 1 hour before night time sleep after a fast of 3 to 4 hours.

8. The method in claim 6 wherein the preferred human pharmacological dose of the component 1 is 500 milligrams and the component 2 is 20 to 50 milligrams, and administered at any time during the day after a fast of 3 to 4 hours.
9. A method for augmenting the rate of growth of immature domestic animals by oral ingestion administration of the method of claim 1 at any time during the day .
10. The method of claim 9, wherein the appropriate pharmacological dose of the component 1 is the product of multiplying 8 milligrams by the numerical value of the animal weight in kilograms and the component 2 dose is a range of 1 to 4 milligrams multiplied by the numerical weight of the animal in kilograms.

## US PATENT DOCUMENTS

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